

IN THE CLAIMS:

The status of the claims is noted below.

1. (Currently Amended) An information processing apparatus comprising:
~~an extracting means for extracting an extractor operable to extract~~ main information including first copy control information and auxiliary information representing attributes of said main information from input information; ~~said main information further including an indication at least whether an apparatus that recorded said main information recognized and processed said first copy control information;~~
~~a first generating means for generating second generator operable to generate~~ copy control permission information based on said ~~extracted~~ auxiliary information ~~extracted by said extracting means if said main information indicates that said an apparatus that recorded said main information did not recognize and process said first copy control information; and~~
~~an adding means for adding adder operable to add~~ said second copy control permission information generated by said ~~first generating means generation~~ to said main information extracted by said ~~extracting means extractor.~~
2. (Currently Amended) ~~An~~ The information processing apparatus according to claim 1 further having: ~~wherein said generator is further operable to generate a second generating means for generating~~ information on validity of said first copy control permission information based upon whether said apparatus that recorded said main information recognized and processed said first copy control information; ~~and~~
~~a means for adding said information on validity generated by said second generating means to said main information extracted by said extracting means.~~

3. (Currently Amended) ~~An~~ The information processing apparatus according to claim 1 wherein:

said main information is a transport stream; and

said auxiliary information is information indicating a mode in which said main information is encoded.

4. (Currently Amended) ~~An~~ The information processing apparatus according to claim 3 wherein said ~~second copy control permission~~ information is added to said main information by said ~~adding means~~ ~~adder~~ for each transport packet of said transport stream.

5. (Currently Amended) ~~An~~ The information processing apparatus according to claim 1 wherein:

said input information is received through an IEEE1394 digital interface; and

said auxiliary information is an ~~EMI~~ Encryption Mode Indicator (EMI).

Claims 6 and 7 (Cancelled)

8. (Currently Amended) An information processing method ~~adopted by an~~ ~~information processing apparatus~~ for outputting information, said method comprising the steps of:

extracting main information including ~~first~~ copy control information and auxiliary information representing attributes of said main information from input information; ~~said main information further including an indication at least whether an apparatus that recorded said main information recognized and processed said first copy control information;~~

generating ~~second copy control permission~~ information based on said extracted auxiliary information if ~~said main information indicates that said an~~ apparatus that recorded said main information did not recognize and process said ~~first~~ copy control information; and

adding said generated ~~second~~ copy control permission information to said
extracted main information.

Claims 9-14 (Cancelled)

15. (New) The information processing apparatus of claim 1, further
comprising:

a splitter operable to split the input information into a plurality of isochronous
packets, each having an Encryption Mode Indicator (EMI) associated therewith; and

an analyzing circuit operable to select a strongest copy restriction mode from
among the EMIs associated with the plurality of isochronous packets at a value representative of
the input information.

16. (New) The information processing apparatus of claim 15, further
comprising an EMI-CPI encoder operable to generate a Copy Permission Indicator (CPI)
corresponding to the EMI having the strongest copy restriction mode.

17. (New) The information processing method according to claim 8 further
comprising the step of generating information on validity of said copy permission information
based upon whether said apparatus that recorded said main information recognized and processed
said first copy control information.

18. (New) The information processing method according to claim 8 wherein:
said main information is a transport stream; and
said auxiliary information is information indicating a mode in which said main
information is encoded.

19. (New) The information processing method according to claim 8 wherein
said copy permission information is added to said main information by said adder for each

transport packet of said transport stream.

20. (New) The information processing method according to claim 8 wherein:
said input information is received through an IEEE1394 digital interface; and
said auxiliary information is an Encryption Mode Indicator (EMI).

21. (New) The information processing method of claim 8, further comprising
the steps of:

splitting the input information into a plurality of isochronous packets, each having
an Encryption Mode Indicator (EMI) associated therewith; and

selecting a strongest copy restriction mode from among the EMIs associated with
the plurality of isochronous packets at a value representative of the input information.

22. (New) The information processing method of claim 21, further
comprising the step of generating a Copy Permission Indicator (CPI) corresponding to the EMI
having the strongest copy restriction mode.

23. (New) An information processing apparatus comprising:
an extractor operable to extract main information including copy control
information (CCI) and auxiliary information representing attributes of said main information
from input information;

a flag generating circuit operable to generate a flag indicating that said
information processing apparatus is a non-cognizant recorder that is not capable of decoding the
extracted CCI; and

a recorder operable to record said generated flag along with said main information
to a recording medium.

24. (New) The information processing apparatus of claim 23, wherein said

flag is indicative that said CCI of said main information is invalid.

25. (New) The information processing apparatus of claim 24, wherein said flag is interpreted by a cognizant recorder reading said main information from said recording medium.

26. (New) An information processing method comprising the steps of:
extracting main information including copy control information (CCI) and
auxiliary information representing attributes of said main information from input information;
generating a flag indicating that an information processing apparatus reading said
main information is a non-cognizant recorder that is not capable of decoding the extracted CCI;
and
recording said generated flag along with said main information to a recording
medium.

27. (New) The information processing method of claim 26, wherein said flag
is indicative that said CCI of said main information is invalid.

28. (New) The information processing method of claim 27, wherein said flag
is interpreted by a cognizant recorder reading said main information from said recording
medium.

29. (New) An information processing apparatus comprising:
an extractor operable to extract main information including copy control
information and auxiliary information representing attributes of said main information from input
information;
an analyzing circuit operable to analyze said copy control information;
an encoder operable to convert said copy control information into new copy

control information when it is determined that said copy control information is valid;

a generator operable to generate copy permission information based on said extracted auxiliary information if an apparatus that recorded said main information did not recognize and process said copy control information; and

an adder operable to add said copy permission information generated by said generation and said new copy control information to said main information extracted by said extractor.

30. (New) The information processing apparatus according to claim 29 wherein said generator is further operable to generate said new copy control information when it is determined that said copy control information is invalid.

31. (New) The information processing apparatus according to claim 30, wherein it is determined whether said copy control information is valid based upon whether said apparatus that recorded said main information recognized and processed said first copy control information.

32. (New) The information processing apparatus according to claim 29 wherein:

said main information is a transport stream; and

said auxiliary information is information indicating a mode in which said main information is encoded.

33. (New) The information processing apparatus according to claim 32 wherein said copy permission information is added to said main information by said adder for each transport packet of said transport stream.

34. (New) The information processing apparatus according to claim 29

wherein:

said input information is received through an IEEE1394 digital interface; and

said auxiliary information is an Encryption Mode Indicator (EMI).

35. (New) An information processing method for outputting information, said method comprising the steps of:

extracting main information including copy control information and auxiliary information representing attributes of said main information from input information;

analyzing said copy control information;

converting said copy control information into new copy control information when it is determined that said copy control information is valid;

generating copy permission information based on said extracted auxiliary information if an apparatus that recorded said main information did not recognize and process said copy control information; and

adding said generated copy permission information and said new copy control information to said extracted main information.

36. (New) The information processing method of claim 35, further comprising:

splitting the input information into a plurality of isochronous packets, each having an Encryption Mode Indicator (EMI) associated therewith; and

selecting a strongest copy restriction mode from among the EMIs associated with the plurality of isochronous packets at a value representative of the input information.

37. (New) The information processing method of claim 36, wherein an EMI-CPI encoder generates a Copy Permission Indicator (CPI) corresponding to the EMI having the

strongest copy restriction mode.

38. (New) The information processing method according to claim 36, further comprising the step of generating information on validity of said copy permission information based upon whether said apparatus that recorded said main information recognized and processed said first copy control information.

39. (New) The information processing method according to claim 36, wherein:

said main information is a transport stream; and

said auxiliary information is information indicating a mode in which said main information is encoded.

40. (New) The information processing method according to claim 36, wherein said copy permission information is added to said main information by said adder for each transport packet of said transport stream.

41. (New) The information processing method according to claim 36, wherein:

said input information is received through an IEEE1394 digital interface; and

said auxiliary information is an Encryption Mode Indicator (EMI).

42. (New) The information processing method of claim 36, further comprising the steps of:

splitting the input information into a plurality of isochronous packets, each having an Encryption Mode Indicator (EMI) associated therewith; and

selecting a strongest copy restriction mode from among the EMIs associated with the plurality of isochronous packets at a value representative of the input information.

43. (New) The information processing method of claim 42, further comprising the step of generating a Copy Permission Indicator (CPI) corresponding to the EMI having the strongest copy restriction mode.

44. (New) An information processing apparatus comprising:
an extractor operable to extract main information including copy control information (CCI) and auxiliary information representing attributes of said main information from input information;
an analyzing circuit operable to analyze said copy control information;
a flag generating circuit operable to generate a flag indicating that said information processing apparatus is a non-cognizant recorder that is not capable of decoding the extracted and analyzed CCI; and
a recorder operable to record said generated flag along with said main information to a recording medium.

45. (New) The information processing apparatus of claim 44, wherein said flag is indicative that said CCI of said main information is invalid.

46. (New) The information processing apparatus of claim 45, wherein said flag is interpreted by a cognizant recorder reading said main information from said recording medium.

47. (New) An information processing method comprising the steps of:
extracting main information including copy control information (CCI) and auxiliary information representing attributes of said main information from input information;
analyzing said copy control information;
generating a flag indicating that an information processing apparatus reading said

main information is a non-cognizant recorder that is not capable of decoding the extracted and analyzed CCI; and

recording said generated flag along with said main information to a recording medium.

48. (New) The information processing method of claim 47, wherein said flag is indicative that said CCI of said main information is invalid.

49. (New) The information processing method of claim 48, wherein said flag is interpreted by a cognizant recorder reading said main information from said recording medium.

50. (New) An information processing apparatus comprising:
an extractor operable to extract main information including copy control information and auxiliary information representing attributes of said main information from input information;

a first generator operable to generate copy permission information and a second generator operable to generate copy control information based on said extracted auxiliary information if an apparatus that recorded said main information did not recognize and process said copy control information; and

an adder operable to add said copy permission information and said copy control information to said main information extracted by said extractor.

51. (New) The information processing apparatus according to claim 50, wherein said second generator is further operable to generate said copy control information when it is determined that said copy control information is invalid.

52. (New) The information processing apparatus according to claim 51,

wherein it is determined whether said copy control information is valid based upon whether said apparatus that recorded said main information recognized and processed said first copy control information.

53. (New) The information processing apparatus according to claim 50,
wherein:

said main information is a transport stream; and

said auxiliary information is information indicating a mode in which said main information is encoded.

54. (New) The information processing apparatus according to claim 53,
wherein said copy permission information and said copy control information are added to said main information by said adder for each transport packet of said transport stream.

55. (New) The information processing apparatus according to claim 50,
wherein:

said input information is received through an IEEE1394 digital interface; and

said auxiliary information is an Encryption Mode Indicator (EMI).

56. (New) An information processing method for outputting information, said method comprising the steps of:

extracting main information including copy control information and auxiliary information representing attributes of said main information from input information;

generating copy permission information and copy control information based on said extracted auxiliary information if an apparatus that recorded said main information did not recognize and process said copy control information; and

adding said generated copy permission information and said copy control

information to said extracted main information.

57. (New) The information processing method of claim 56, further comprising the steps of:

splitting the input information into a plurality of isochronous packets, each having an Encryption Mode Indicator (EMI) associated therewith; and

selecting a strongest copy restriction mode from among the EMIs associated with the plurality of isochronous packets at a value representative of the input information.

58. (New) The information processing apparatus of claim 56, wherein an EMI-CPI encoder generates a Copy Permission Indicator (CPI) corresponding to the EMI having the strongest copy restriction mode.

59. (New) The information processing method according to claim 56, further comprising the step of generating information on validity of said copy permission information based upon whether said apparatus that recorded said main information recognized and processed said first copy control information.

60. (New) The information processing method according to claim 56, wherein:

said main information is a transport stream; and

said auxiliary information is information indicating a mode in which said main information is encoded.

61. (New) The information processing method according to claim 56, wherein said copy permission information and said copy control information is added to said main information by said adder for each transport packet of said transport stream.

62. (New) The information processing method according to claim 56,

wherein:

said input information is received through an IEEE1394 digital interface; and

said auxiliary information is an Encryption Mode Indicator (EMI).

63. (New) The information processing method of claim 56, further comprising the steps of:

splitting the input information into a plurality of isochronous packets, each having an Encryption Mode Indicator (EMI) associated therewith; and

selecting a strongest copy restriction mode from among the EMIs associated with the plurality of isochronous packets at a value representative of the input information.

64. (New) The information processing method of claim 63, further comprising the step of generating a Copy Permission Indicator (CPI) and copy control information corresponding to the EMI having the strongest copy restriction mode.